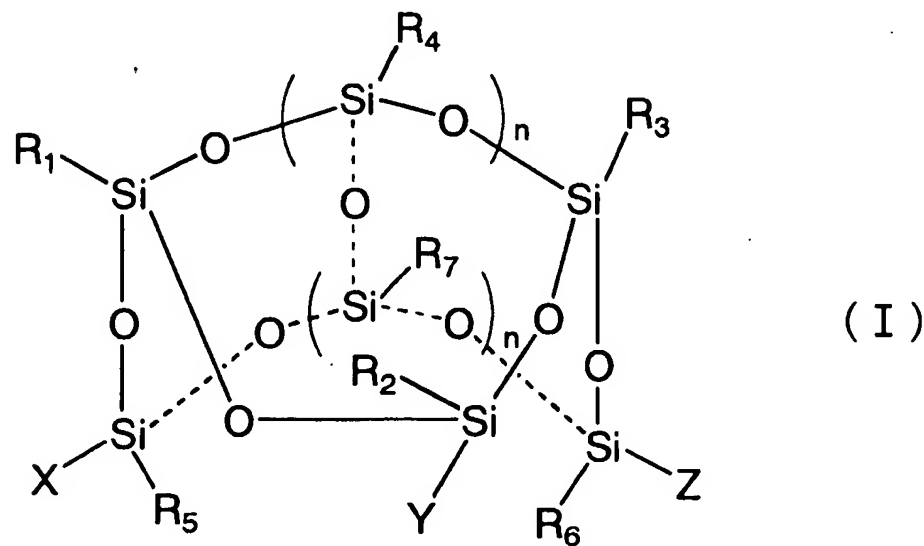


**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

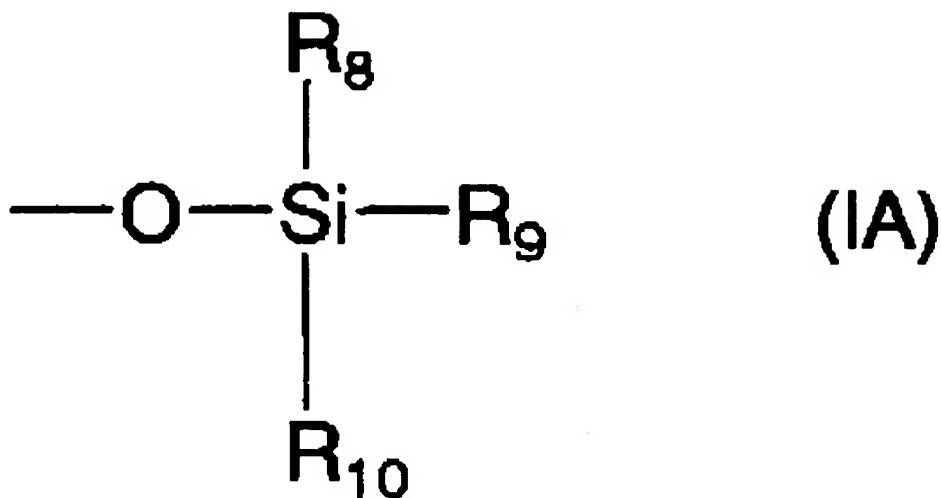
**LISTING OF CLAIMS:**

1. (currently amended): An insulating-film forming material comprising a polymer (A) that has, as a repeating unit thereof, a structure represented by the following general formula (I):

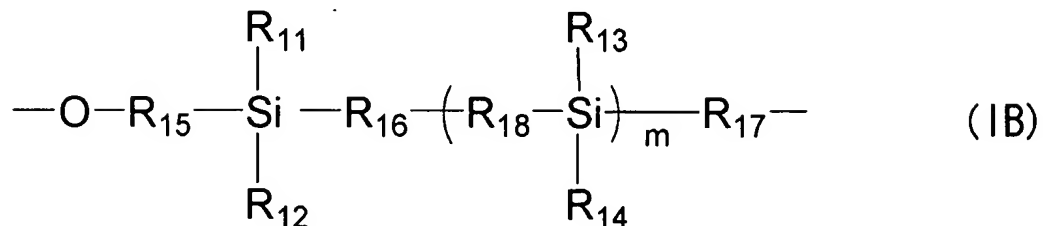


wherein  $R_1$  to  $R_7$  are the same or different, and each represents a monovalent group;  
one of X, Y and Z represents a group represented by formula (IA), and another one of X, Y and Z is -O-, and the other one of X, Y and Z is a group represented by formula (IB) wherein the oxygen atom that directly bonds to the silicon atom in formula (IB) is also connected to formula (I); and

n indicates an integer of from 1 to 10:



wherein  $\text{R}_8$  to  $\text{R}_{10}$  are the same or different, and each represents a monovalent group,



wherein  $\text{R}_{11}$  to  $\text{R}_{14}$  are the same or different, and each represents a monovalent group;

$\text{R}_{15}$  to  $\text{R}_{17}$  are the same or different, and each represents a single bond or a divalent group;

$\text{R}_{18}$  represents a single bond or -O-; ~~and~~

m indicates an integer of from 0 to 10; and

at least one of  $\text{R}_1$  to  $\text{R}_{17}$  in formula (I) satisfies at least one of the following conditions (i) to (iii):

at least one of  $\text{R}_1$  to  $\text{R}_{17}$  includes at least one of

- (i) at least one carbon-carbon triple bond;
- (ii) at least one of a carbon-carbon double bond and a carbon-nitrogen double bond that conjugates with an aromatic group; and
- (iii) at least one aromatic ring having at least 10 carbon atoms.

2. (original): The insulating-film forming material as claimed in claim 1, wherein  $R_1$  to  $R_{14}$  in formula (I) are the same or different, and each represents a hydroxyl group, a monovalent hydrocarbon group, a monovalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction, a group derived from a monovalent hydrocarbon group by substituting a part of the carbon atom(s) in the monovalent hydrocarbon group with a silicon atom, or a group derived from a monovalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction, by substituting a part of the carbon atom(s) in the monovalent group with a silicon atom, and  $R_{15}$  to  $R_{17}$  are the same or different, and each represents a single bond, a divalent hydrocarbon group, or a divalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction.

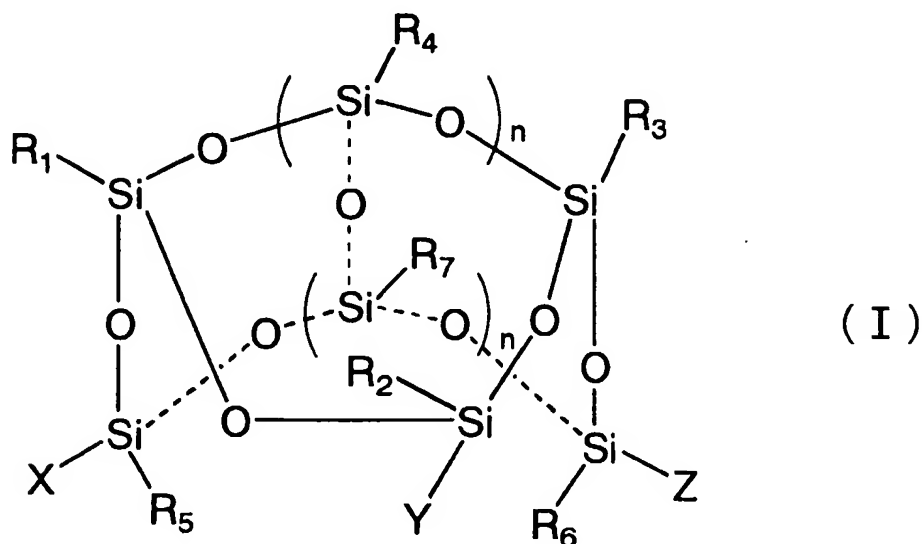
3. *(canceled).*

4. (original): An insulating film obtained by using an insulating-film forming material as claimed in claim 1.

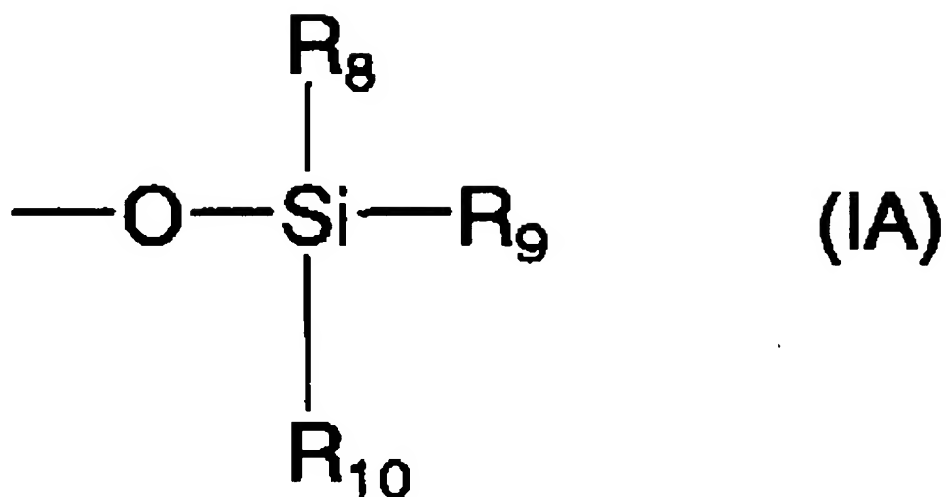
5. (withdrawn): A porous insulating-film forming material comprising:  
a polymer that has, as a repeating unit thereof, a structure represented by formula (I); and  
at least one of a compound (B-1) and particles (B-2),

(B-1) a compound having a boiling or decomposition point of 250°C to 450°C,

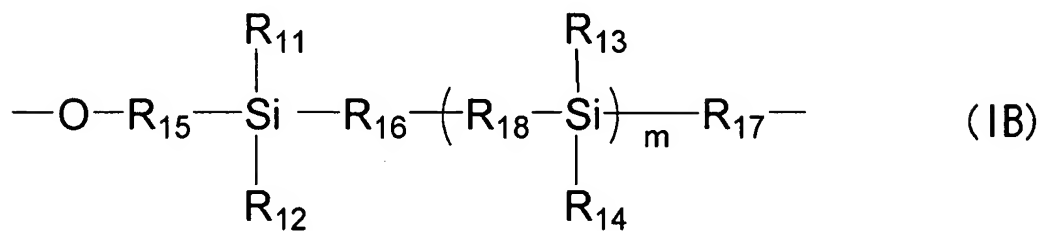
(B-2) hollow particles:



wherein  $R_1$  to  $R_7$  are the same or different, and each represents a monovalent group;  
one of X, Y and Z represents a group represented by formula (IA), and another one of X, Y and Z is -O-, and the other one of X, Y and Z is a group represented by formula (IB) wherein the oxygen atom that directly bonds to the silicon atom in formula (IB) is also connected to formula (I); and  
n indicates an integer of from 1 to 10:



wherein  $\text{R}_8$  to  $\text{R}_{10}$  are the same or different, and each represents a monovalent group,



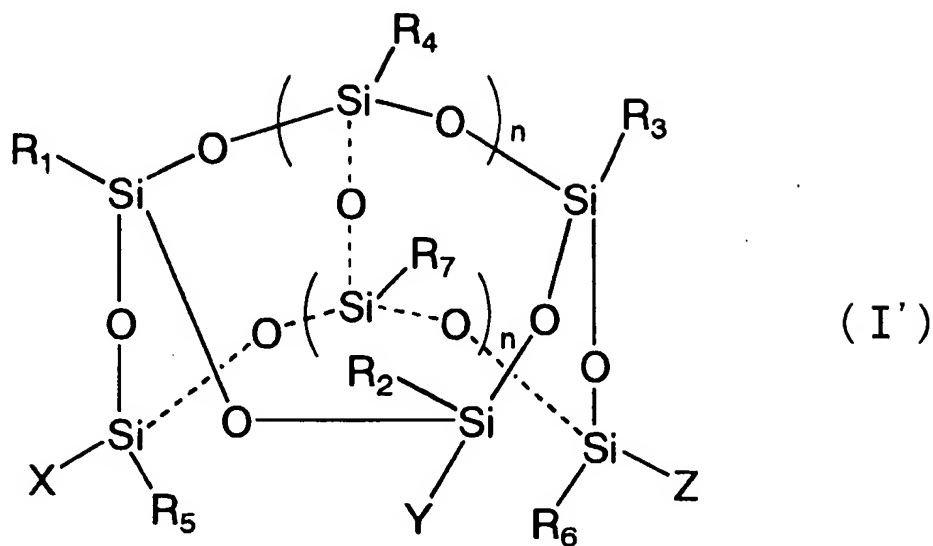
wherein  $\text{R}_{11}$  to  $\text{R}_{14}$  are the same or different, and each represents a monovalent group;

$\text{R}_{15}$  to  $\text{R}_{17}$  are the same or different, and each represents a single bond or a divalent group;

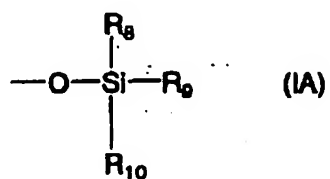
$\text{R}_{18}$  represents a single bond or  $\text{-O-}$ ; and

$m$  indicates an integer of from 0 to 10.

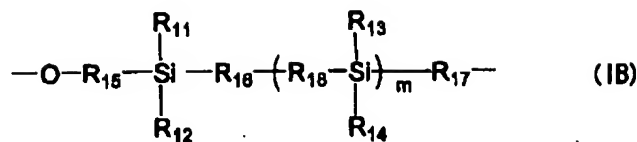
6. (withdrawn): A porous insulating-film forming material comprising a polymer that has, as a repeating unit thereof, a structure represented by formula (I'):



wherein  $R_1$  to  $R_7$  are the same or different, and each represents a monovalent group;  
 one of X, Y and Z represents a group represented by formula (IA), and another one of X, Y and Z is -O-, and the other one of X, Y and Z is a group represented by formula (IB) wherein the oxygen atom that directly bonds to the silicon atom in formula (IB) is also connected to formula (I); and  
 n indicates an integer of from 1 to 10:



wherein  $R_8$  to  $R_{10}$  are the same or different, and each represents a monovalent group,



wherein  $\text{R}_{11}$  to  $\text{R}_{14}$  are the same or different, and each represents a monovalent group;  
 $\text{R}_{15}$  to  $\text{R}_{17}$  are the same or different, and each represents a single bond or a divalent group;  
 $\text{R}_{18}$  represents a single bond or  $-\text{O}-$ ; and  
 $m$  indicates an integer of from 0 to 10; and at least one of  $\text{R}_1$  to  $\text{R}_{14}$  satisfies at least one of the following conditions (a) to (c):

at least one of  $\text{R}_1$  to  $\text{R}_{14}$  includes at least one of

- (a) a structure that decomposes under heat at  $250^{\circ}\text{C}$  to  $450^{\circ}\text{C}$  to generate gas;
- (b) a structure that decomposes through UV irradiation to generate gas; and
- (c) a structure that decomposes through electron beam irradiation to generate gas.

7. (withdrawn): The porous insulating-film forming material as claimed in claim 5, wherein at least one of  $\text{R}_1$  to  $\text{R}_{17}$  in formula (I) satisfies at least one of the following conditions ( $\alpha$ ) and ( $\beta$ ):

( $\alpha$ ) at least one of  $\text{R}_1$  to  $\text{R}_{14}$  is a monovalent hydrocarbon group, a monovalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction, a group derived from a monovalent hydrocarbon group by substituting a part of the carbon atom(s) in the monovalent hydrocarbon group with a silicon atom, or a group derived

from a monovalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction, by substituting a part of the carbon atom(s) in the monovalent group with a silicon atom; and

( $\beta$ ) at least one of  $R_{15}$  to  $R_{17}$  is a divalent hydrocarbon group, or a divalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction.

8. (withdrawn): The porous insulating-film forming material as claimed in claim 6, wherein at least one of  $R_1$  to  $R_{17}$  in formula (I') satisfies at least one of the following conditions ( $\alpha$ ) and ( $\beta$ ):

( $\alpha$ ) at least one of  $R_1$  to  $R_{14}$  is a monovalent hydrocarbon group, a monovalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction, a group derived from a monovalent hydrocarbon group by substituting a part of the carbon atom(s) in the monovalent hydrocarbon group with a silicon atom, or a group derived from a monovalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction, by substituting a part of the carbon atom(s) in the monovalent group with a silicon atom; and

( $\beta$ ) at least one of  $R_{15}$  to  $R_{17}$  is a divalent hydrocarbon group, or a divalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction.



9. (withdrawn): The porous insulating-film forming material as claimed in claim 5, wherein at least one of  $R_1$  to  $R_{17}$  in formula (I) satisfies at least one of the following conditions

(i) to (iii):

at least one of  $R_1$  to  $R_{17}$  includes at least one of

(i) at least one carbon-carbon triple bond;

(ii) at least one of a carbon-carbon double bond and a carbon-nitrogen double bond that conjugates with an aromatic group; and

(iii) at least one aromatic ring having at least 10 carbon atoms.

10. (withdrawn): The porous insulating-film forming material as claimed in claim 6, wherein at least one of  $R_1$  to  $R_{17}$  in formula (I') satisfies at least one of the following conditions

(i) to (iii):

at least one of  $R_1$  to  $R_{17}$  includes at least one of

(i) at least one carbon-carbon triple bond;

(ii) at least one of a carbon-carbon double bond and a carbon-nitrogen double bond that conjugates with an aromatic group; and

(iii) at least one aromatic ring having at least 10 carbon atoms.

11. (withdrawn): A porous insulating film obtained by using an insulating-film forming material as claimed in claim 5.

12. (withdrawn): A porous insulating film obtained by using an insulating-film forming material as claimed in claim 6.

13. (new): The insulating-film forming material as claimed in claim 1, wherein at least one of  $R_1$  to  $R_{17}$  in formula (I) satisfies the condition that at least one of  $R_1$  to  $R_{17}$  includes at least one carbon-carbon triple bond.

14. (new): The insulating-film forming material as claimed in claim 1, wherein at least one of  $R_1$  to  $R_{17}$  in formula (I) is a monovalent group capable of becoming a hydrocarbon group through a Diels-Alder reaction followed by an elimination reaction.

15. (new): The insulating film as claimed in claim 4, wherein the insulating film is obtained by coating a substrate with the insulating-film forming material as claimed in claim 1 and then drying and heating the insulating-film forming material.